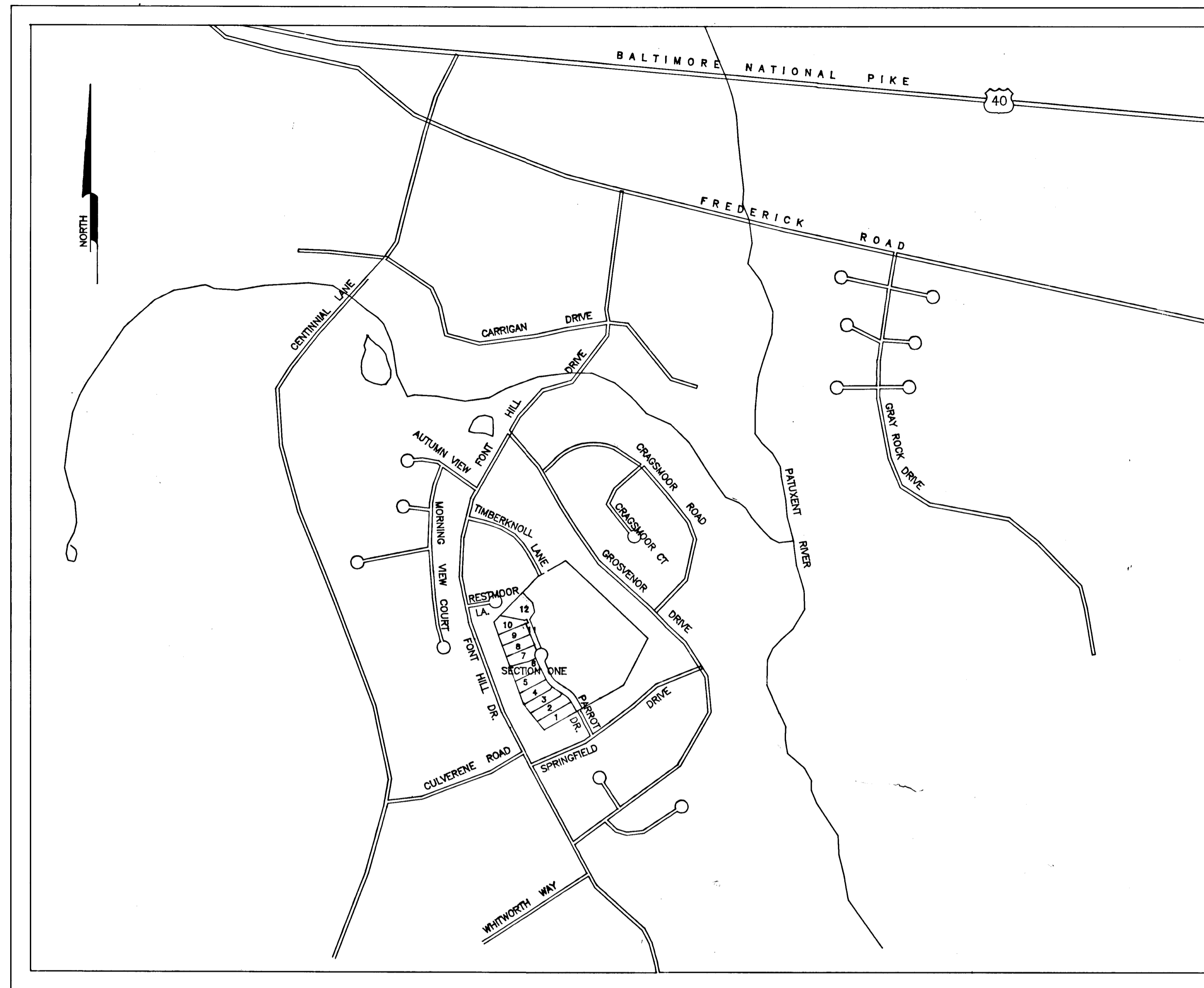


GENERAL NOTES

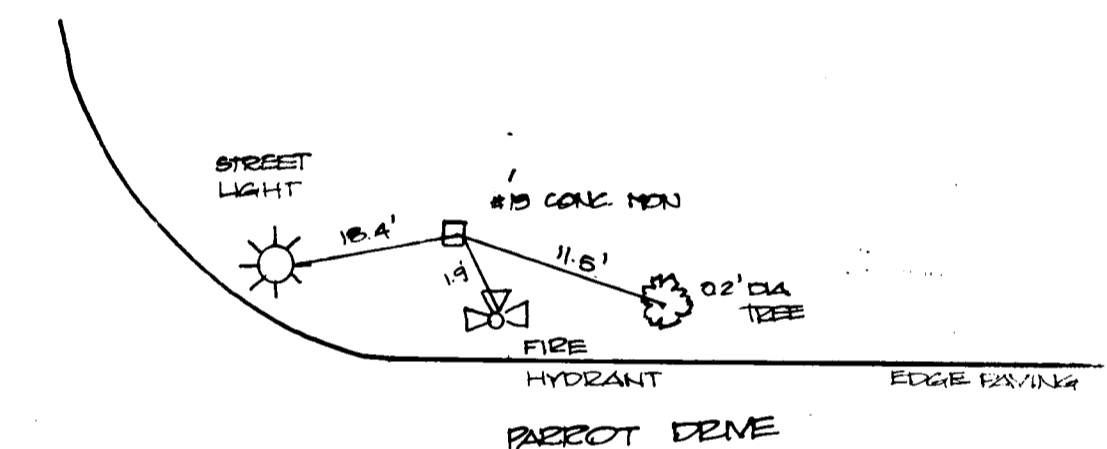
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD AND SPECIFICATION OF THE HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION DIVISION 24 HOURS IN ADVANCE ON COMMENCEMENT OF WORK AT 313-3380.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORKS.
- PROJECT BACKGROUND :
  - TAX MAP 24, PARCEL 725, LIBER 595, FOLIO 473
  - TOTAL AREA OF SUBDIVISION = 20.48 ACRES
  - TOTAL AREA OF THIS SUBMISSION = 6.69 ACRES, NET AREA = 6.61 ACRES
  - NO. OF LOTS PROPOSED = 10 BUILDABLE AND 2 OPEN SPACES
  - SKETCH PLAN WAS APPROVED ON NOVEMBER 12, 1991 UNDER S-92-07.
  - PRELIMINARY PLAN FOR SECTION 1 WAS APPROVED ON MARCH 17, 1992 UNDER P-92-12, SDP 91-24 WAS APPROVED ON APRIL 4, 1991.
  - THIS PLAN IS SUBJECT TO WP-92-131 WHICH WAIVED THE REQUIREMENTS OF SECTION 115(b)(5) TO PERMIT PRIVATE ROADS MAXIMUM 200' TO BE INCREASED TO 240' TO SERVE LOTS 8-10 AND SECTION 16.129(1) NOT TO CONSTRUCT THE REQUIRED SIDEWALK ON ONE SIDE OF THE CUL-DE-SAC.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREETS AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO PLACEMENT OF ANY ASPHALT.
- BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY JOHN MELLEMA, INC. MAY 15, 1992
- HORIZONTAL AND VERTICAL DATUM ARE BASED ON MARYLAND STATE COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY CONTROL STA. 314002 AND 314003.
- LIGHT POLES AND FIXTURES SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III, ROAD AND BRIDGES.
- PUBLIC WATER AND PUBLIC SEWER WILL BE USED. THE DRAINAGE AREA IS LITTLE PATUXENT.
- AN EXTENDED DETENTION POND IS PROPOSED TO CONTROL ALL LOTS WITH THE EXCEPTION OF THE REAR PORTION OF LOTS 1-10 WHICH WILL REMAIN UNDISTURBED.
- THERE ARE NO WETLANDS WITHIN THE LIMIT OF THIS SECTION.
- GEOTECHNICAL REPORT WAS PREPARED BY HILLIS AND CARNES ASSOCIATES ON JANUARY 27, 1992.
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY AS BUILT PLANS AND THE TOPOGRAPHIC SURVEY BY JOHN MELLEMA, INC.

INDEX

- SHEET COVER
- PLAN & PROFILE
- DRAINAGE PROFILES
- DRAINAGE AREA MAP,
- GRADING PLAN
- STORM WATER MANAGEMENT PLAN AND DETAILS
- SEDIMENT CONTROL PLAN
- GENERAL NOTES FOR PONDS
- SEDIMENT & EROSION CONTROL NOTES



LOCATION MAP  
SCALE : 1" = 600'



MONUMENT RECOVERY

FONT HILL MANOR FARM ESTATES  
ROAD CONSTRUCTION DRAWINGS  
HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS

POINT #	ELEV.	DESCR.
6	433.44	REBAR & CAP
9	437.42	REBAR & CAP
11	440.82	RE NAIL IN DRIVE
12	440.75	REBAR & CAP
14	440.03	RE NAIL IN DRIVE
15	436.81	REBAR & CAP
17	436.17	REBAR & CAP
19	437.09	CONC. MON.
20	439.68	REBAR & CAP
21	440.80	REBAR & CAP
22	439.80	REBAR & CAP
23	436.42	REBAR & CAP
24	482.64	REBAR & CAP
25	434.58	REBAR & CAP

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Mina Hironaka* 5/24/92  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT, DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*John M. Longman* 5/19/92  
CHIEF, BUREAU OF HIGHWAYS, DATE

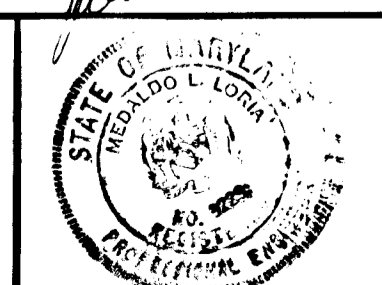
*William R. Rupp* 5-12-92  
CHIEF, BUREAU OF ENGINEERING, DATE

*Donald M. Moran*  
AS-BUILT 1/16/97

1657  
1657

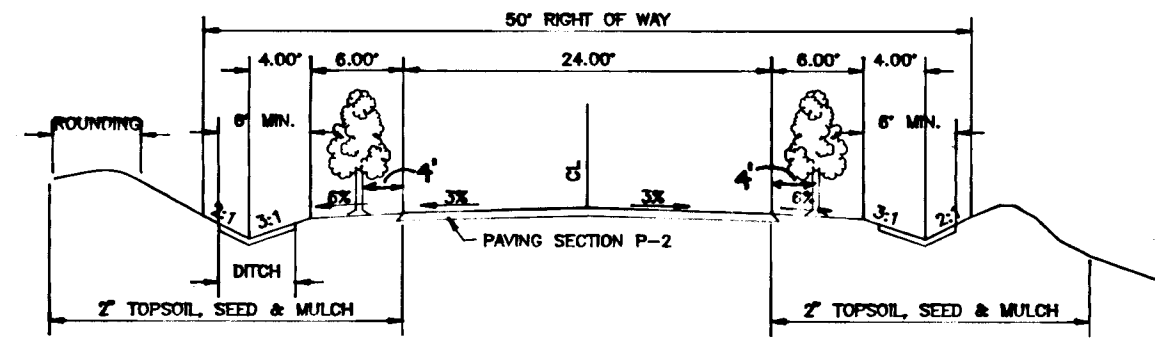
DESIGNED BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
MLL	8-7-92	MLL	10-22-92	MLL	10-22-92
GUS	8-7-92				

**Voria Engineering Inc.**  
CONSULTING ENGINEERS-LAND PLANNERS-SURVEYORS  
3230 BETHANY LANE, SUITE 4, ELLICOTT CITY, MD.  
TEL. 410-465-0400



OWNER / DEVELOPER:  
TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLICOTT CITY, MD. 21041-1447

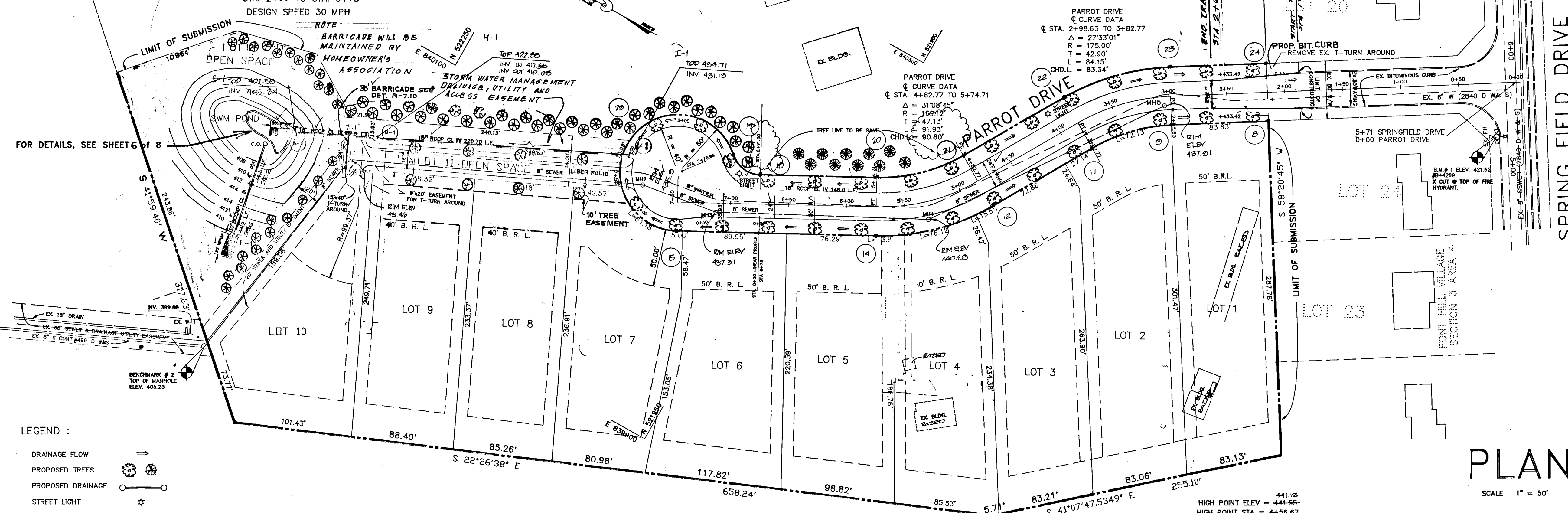
COVER SHEET  
FONT HILL MANOR FARM ESTATES  
SECT. 1, LOTS 1 THRU 12  
TAX MAP 42 PARCEL 725  
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
DATE : 10-22-92 SCALE : AS SHOWN DWG. No. : SHEET 1 OF 9



PARROT DRIVE  
TYPICAL SECTION  
STA. 2+40 TO STA. 6+75  
DESIGN SPEED 30 MPH

		PLANT		SCHEDULE	
SYMBOLS	LOCATION	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE
(Symbol)	PARROT DRIVE	PYRUS CALLERYANA	RED-BARKED PEAR	38	2-1/2 CAL.
(Symbol)	PARROT DRIVE	PICEA ABIES	NORWAY SPRUCE	22	2-1/2 CAL.
(Symbol)	OPEN SPACE	PICEA ABIES	NORWAY SPRUCE	49	2-1/2 CAL.

LIGHTING LEGEND  
★ 100 WATT 'TRADITIONAIRE' SODIUM VAPOR LAMP POST TOP FIXTURE ON A 14 FOOT BLACK FIBERGLASS POLE LOCATED 4'-0" FROM BACK OF CURB.



**PLAN**  
SCALE 1" = 50'

- LEGEND :
- DRAINAGE FLOW
  - PROPOSED TREES
  - PROPOSED DRAINAGE
  - STREET LIGHT

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Amma Horath* 5/24/93  
DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Chris D...* 5/12/93  
DATE

*Chris M. ...* 5/12/93  
DATE

*...* 5-12-93  
DATE

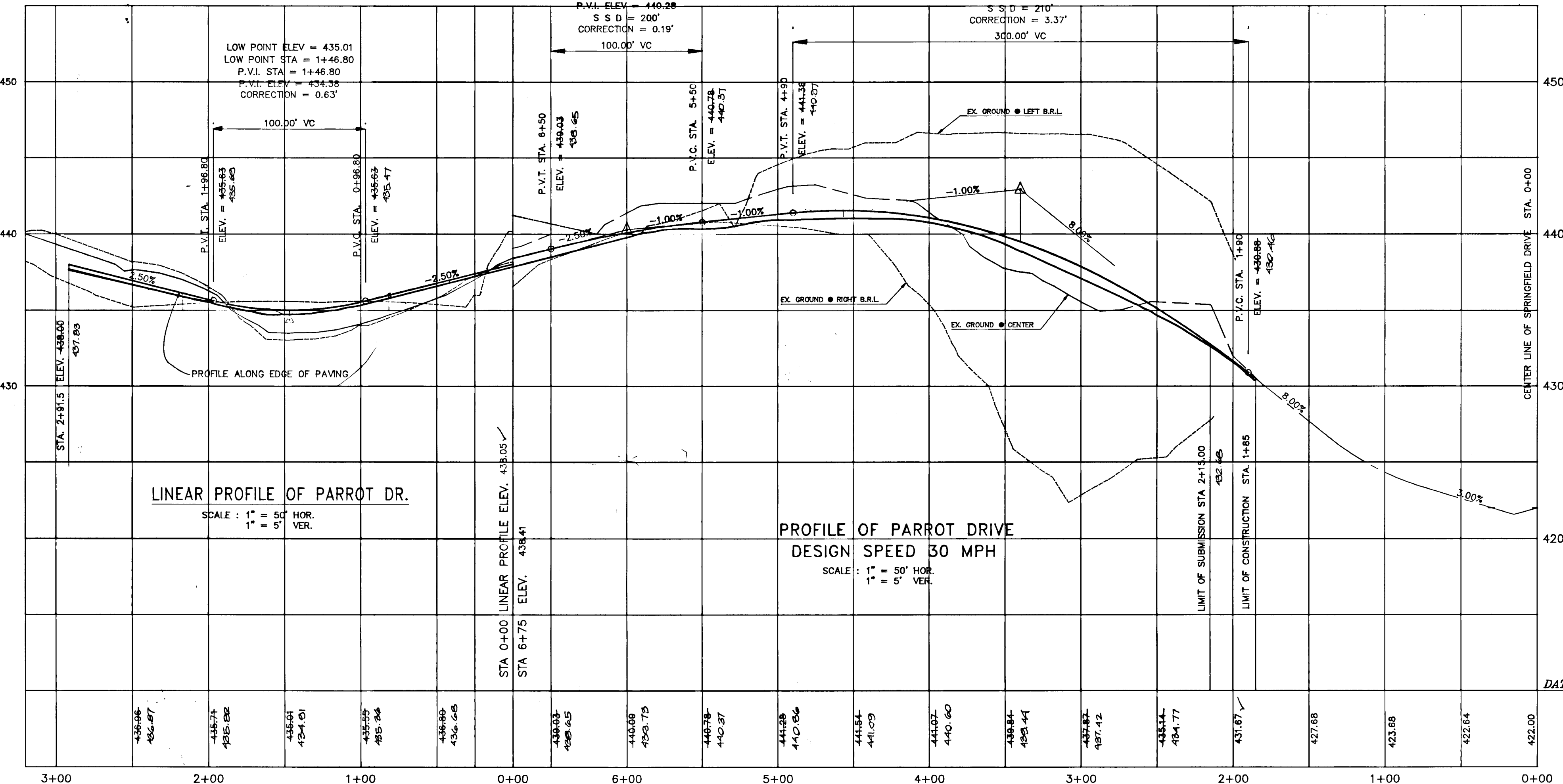
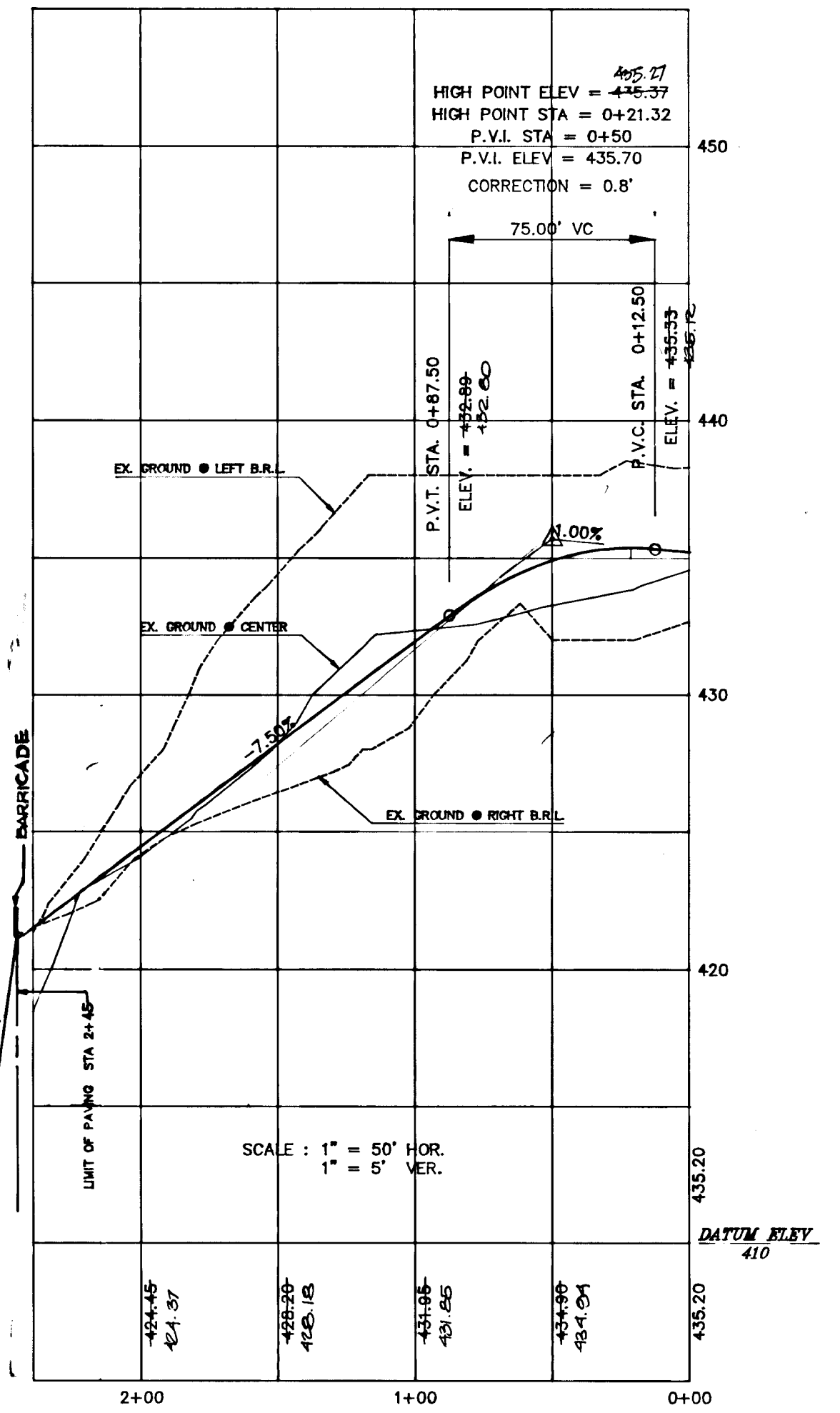
**PLAN AND PROFILE**  
**PARROT DRIVE**  
STA. 0+00 TO 7+70.95  
**FONT HILL MANOR FARM ESTATES**  
SECTION-1 LOTS 1-12

OWNER/DEVELOPER :  
TIMOTHY E. WELSH  
P.O. BOX. 1447  
ELlicott CITY, MD. 21041-1447

SCALE : AS SHOWN DATE : 10-16-92 SHEET 2 OF 9  
DESIGNED : MLL DRAWN : GUS CHECKED : MLL



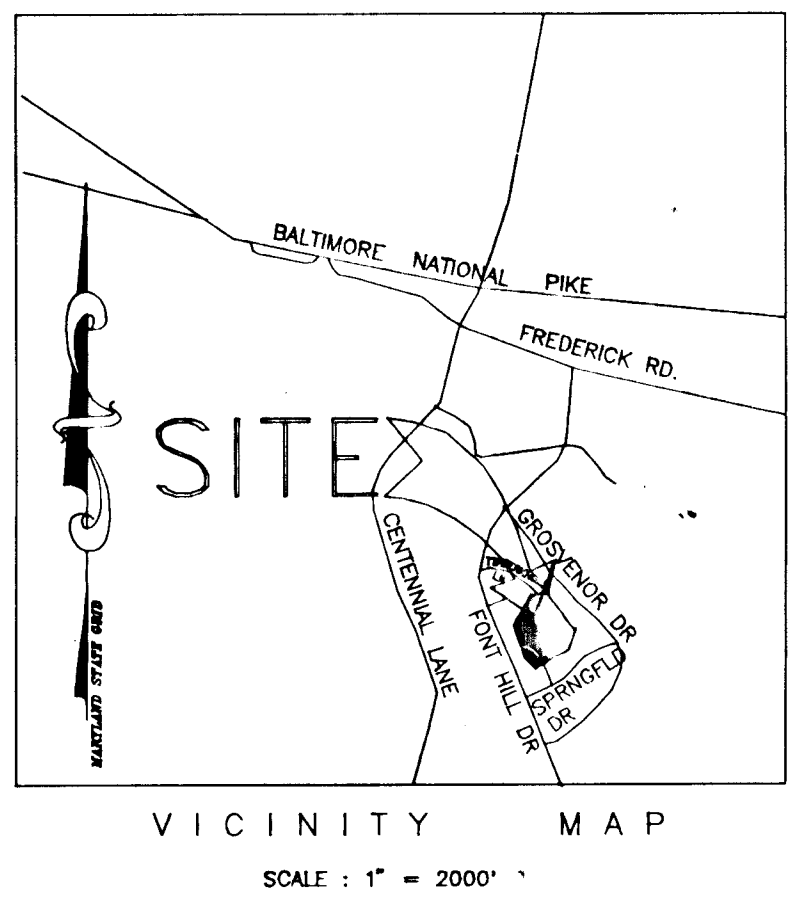
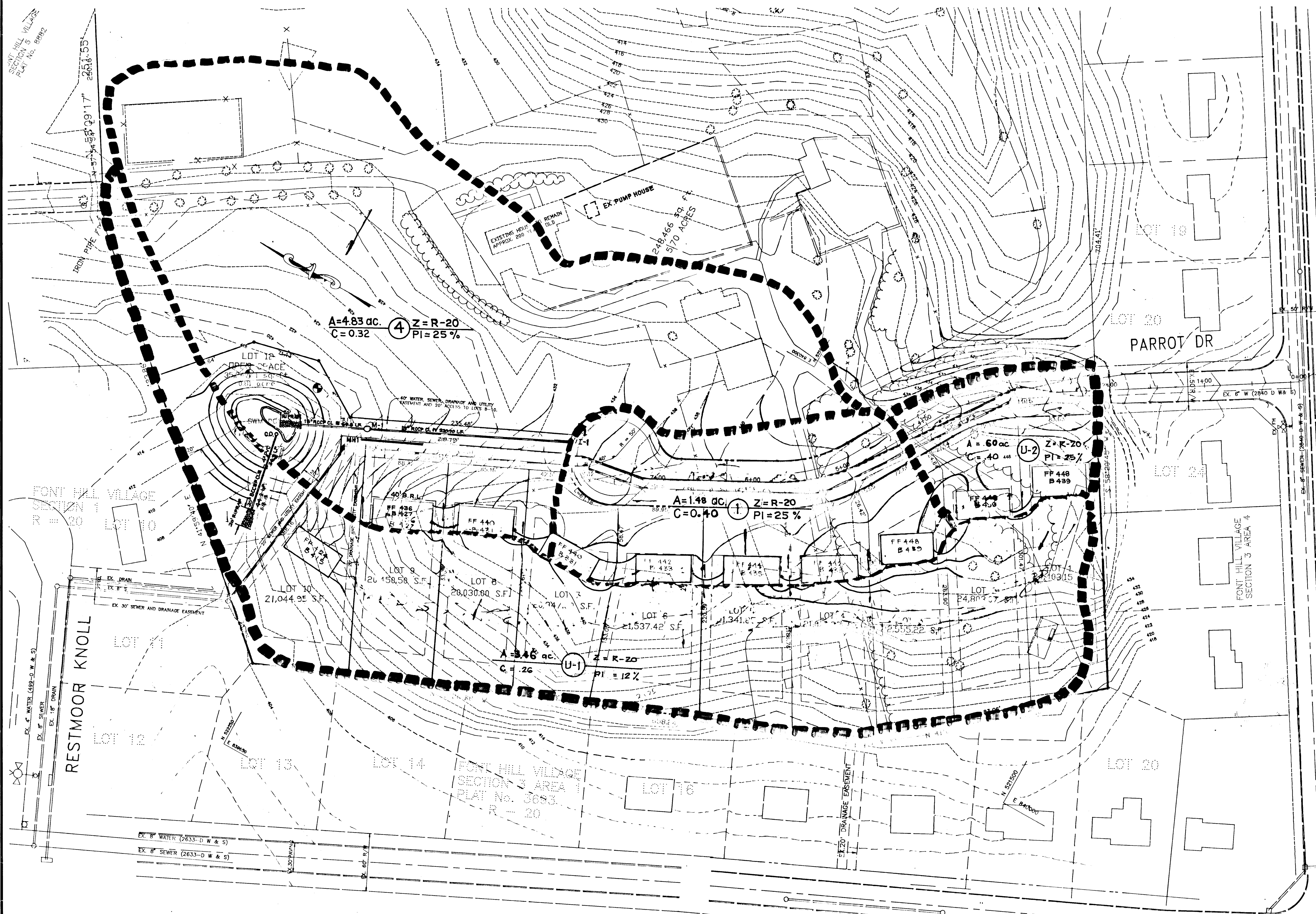
NO.	DATE	DESCRIPTION	BY
	6-15-93	LIGHTING LEGEND	JNC



PROFILE PRIVATE DRIVE  
SCALE 1" = 50' HORIZONTAL  
1" = 5' VERTICAL







SPRING FIELD DRIVE

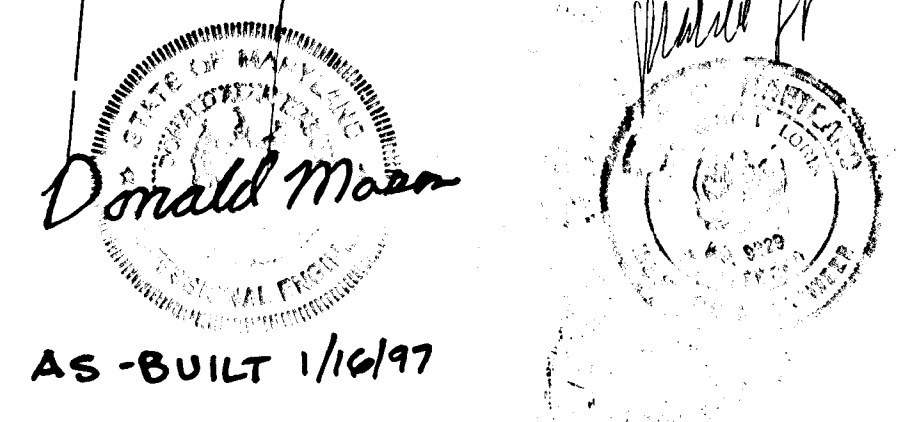
**PLAN**  
FONT HILL DRIVE

SCALE: 1"=50'

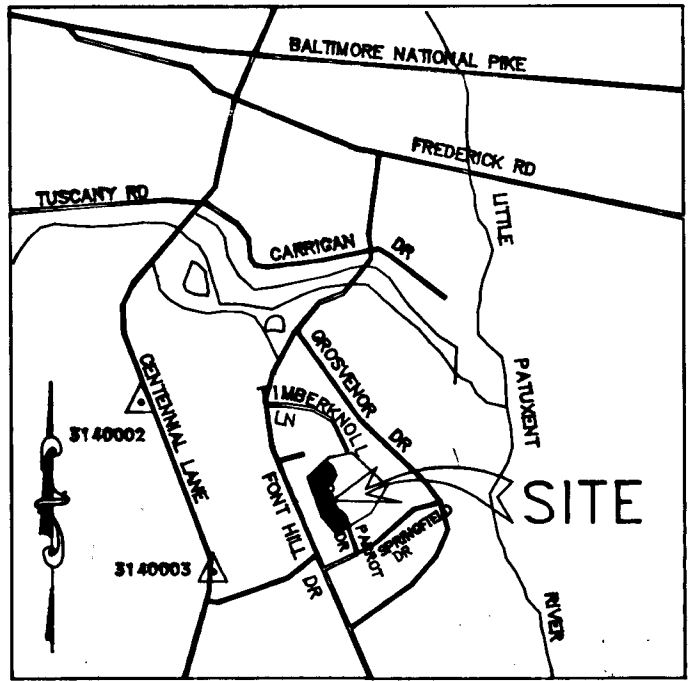
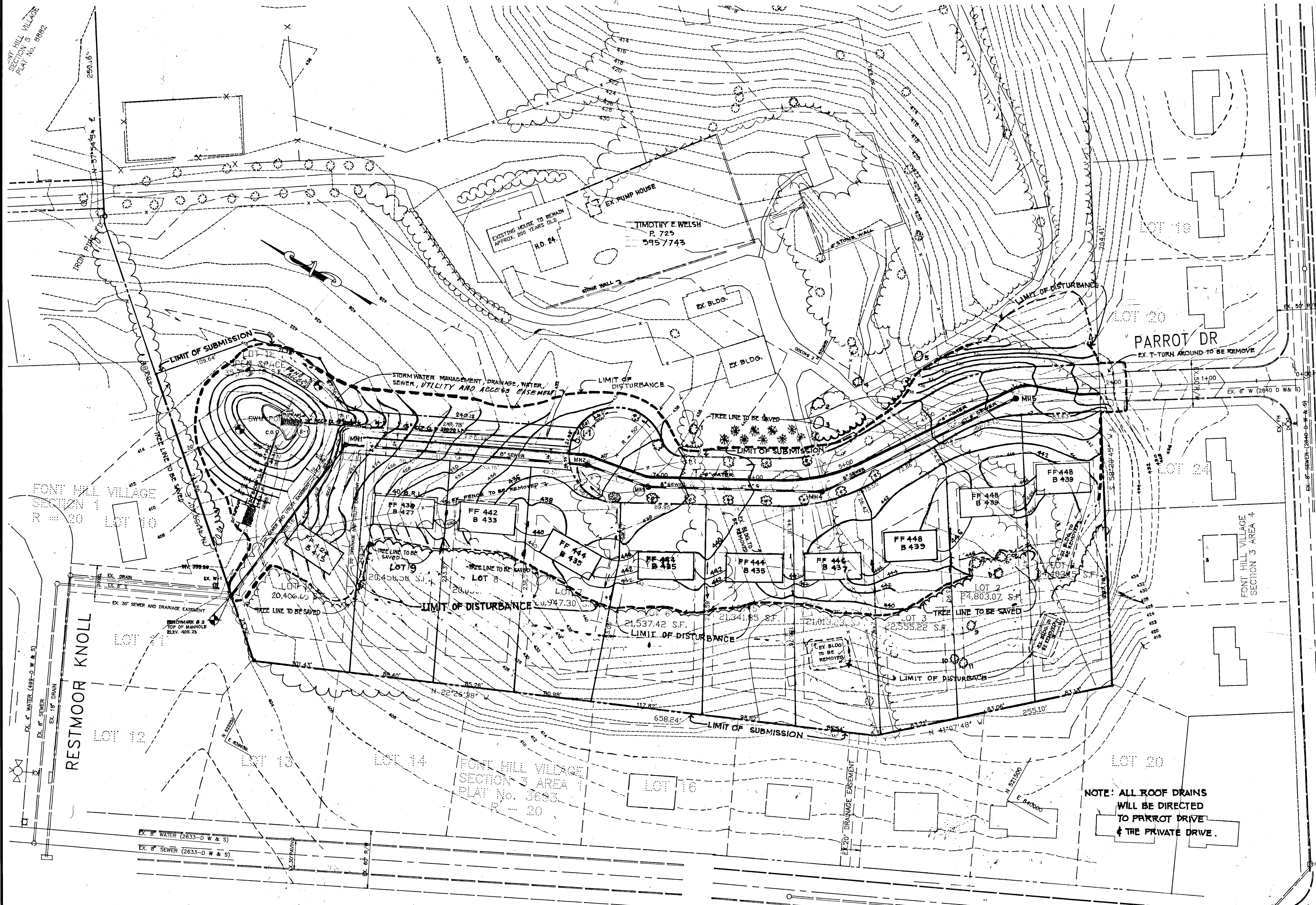
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Chad Damm</i>	5/12/93
CHIEF, BUREAU OF HIGHWAYS	
<i>Alan M. Payne</i>	5/19/93
CHIEF, BUREAU OF HIGHWAYS	
<i>William J. Ryan</i>	5-12-93
CHIEF, BUREAU OF ENGINEERING	
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Emma H. H. H.</i>	5/24/93
CHIEF, BUREAU OF PLANNING AND LAND DEVELOPMENT	

NO.	DATE	REVISION
1		
PROJECT: FONT HILL MANOR FARM ESTATES SECTION ONE, LOTS 1-12		
LOCATION: TAX MAP 24, PARCEL 725 ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: DRAINAGE AREA MAP		

OWNER:	TIMOTHY E. WELSH P.O. BOX 1447 ELLICOTT CITY, MD. 21041-1447
DEVELOPER:	TIMOTHY E. WELSH P.O. BOX 1447 ELLICOTT CITY, MD. 21041-1447



DESIGN: MLL	CHECKED: MLL	DATE: 10-22-92	PROJ. NO.:
DRAWN: JC	APPROVED: MLL	SCALE: 1"=50'	SHEET: 4 OF 9



- TREES TO BE SAVED
1. 36" MULTI-LITERED SIBERIAN ELM
  2. 24" SIBERIAN ELM
  3. 18" SIBERIAN ELM
  4. 48" SIBERIAN ELM
  5. 30" SIBERIAN ELM
  6. 24" LITERED SIBERIAN ELM
  7. 30" LITERED SIBERIAN ELM
  8. 24" MULTI-LITERED SIBERIAN ELM
  9. 5-12" TO 36" SIBERIAN ELM

SPRING FIELD DRIVE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*John M. Taylor* 5/12/92 DATE:  
 CHIEF, LAND DEVELOPMENT DIVISION  
*John M. Taylor* 5/12/92 DATE:  
 CHIEF, BUREAU OF HIGHWAYS  
*John M. Taylor* 5-12-92 DATE:  
 CHIEF, BUREAU OF ENGINEERING  
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Emma Shonard* 5/24/93 DATE:  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

NO.	DATE	REVISION
1		

PROJECT: FONT HILL MANOR FARM ESTATES  
 SECTION ONE, LOTS 1-12  
 LOCATION: TAX MAP 24, PARCEL 725  
 2ND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE: GRADING PLAN

OWNER: TIMOTHY E. WELSH  
 P.O. BOX 1447  
 ELLICOTT CITY, MD. 21041-1447

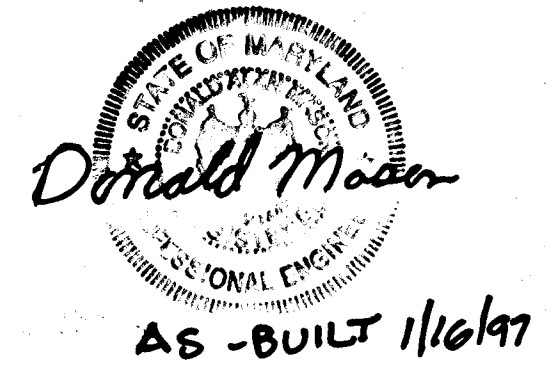
DEVELOPER: TIMOTHY E. WELSH  
 P.O. BOX 1447  
 ELLICOTT CITY, MD. 21041-1447

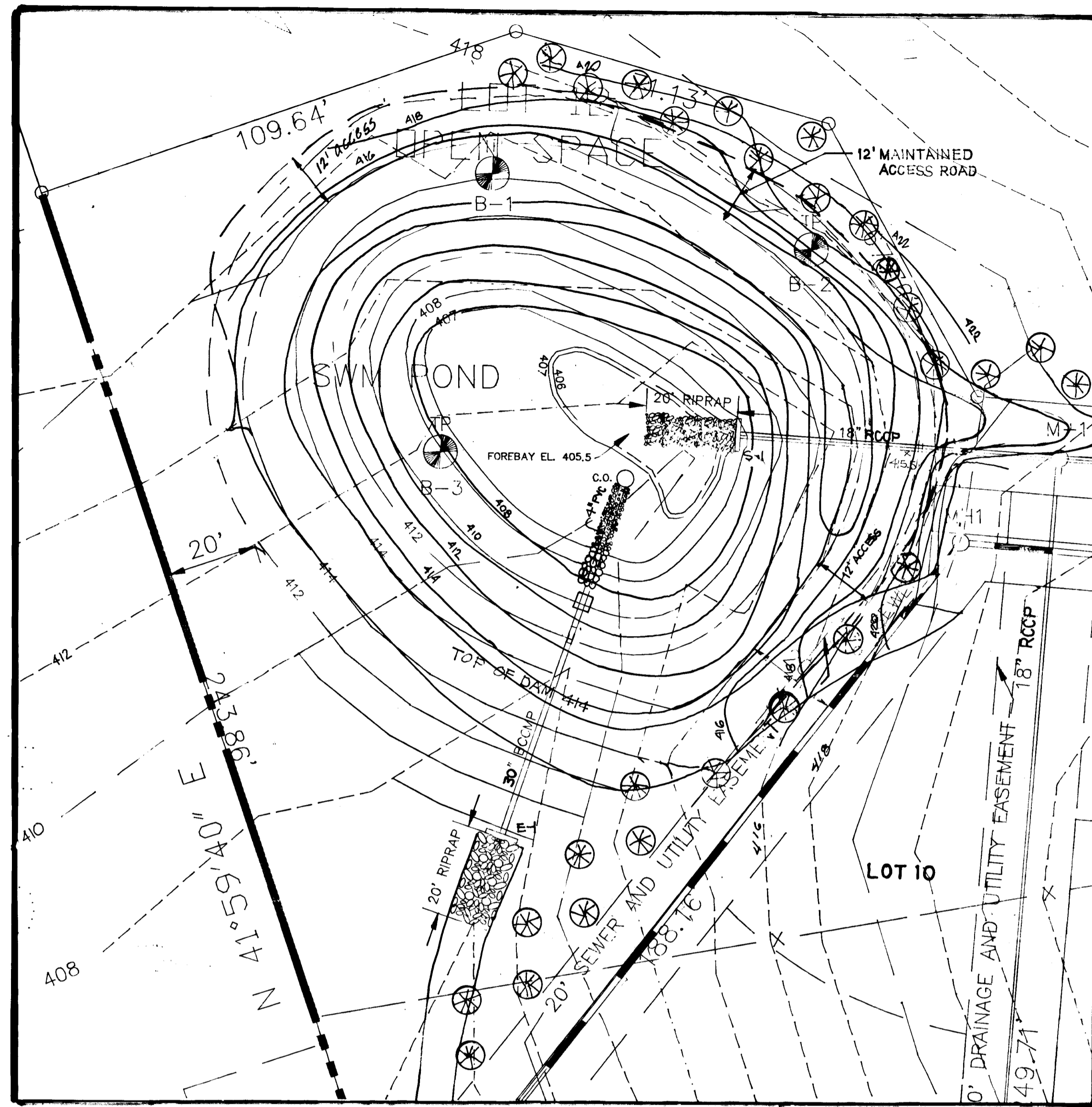
AS-BUILT 11/6/97

DESIGN	M.L.L.	CHECKED	M.L.L.	DATE	10-21-92	PROJ. NO.
DRAWN	AVG	APPROVED	M.L.L.	SCALE	1" = 50'	SHEET 5 OF 9

LEGEND:  
 PROPOSED GRADE  
 EXISTING GRADE  
 LIMIT OF DISTURBANCE  
 TREELINE TO BE SAVED

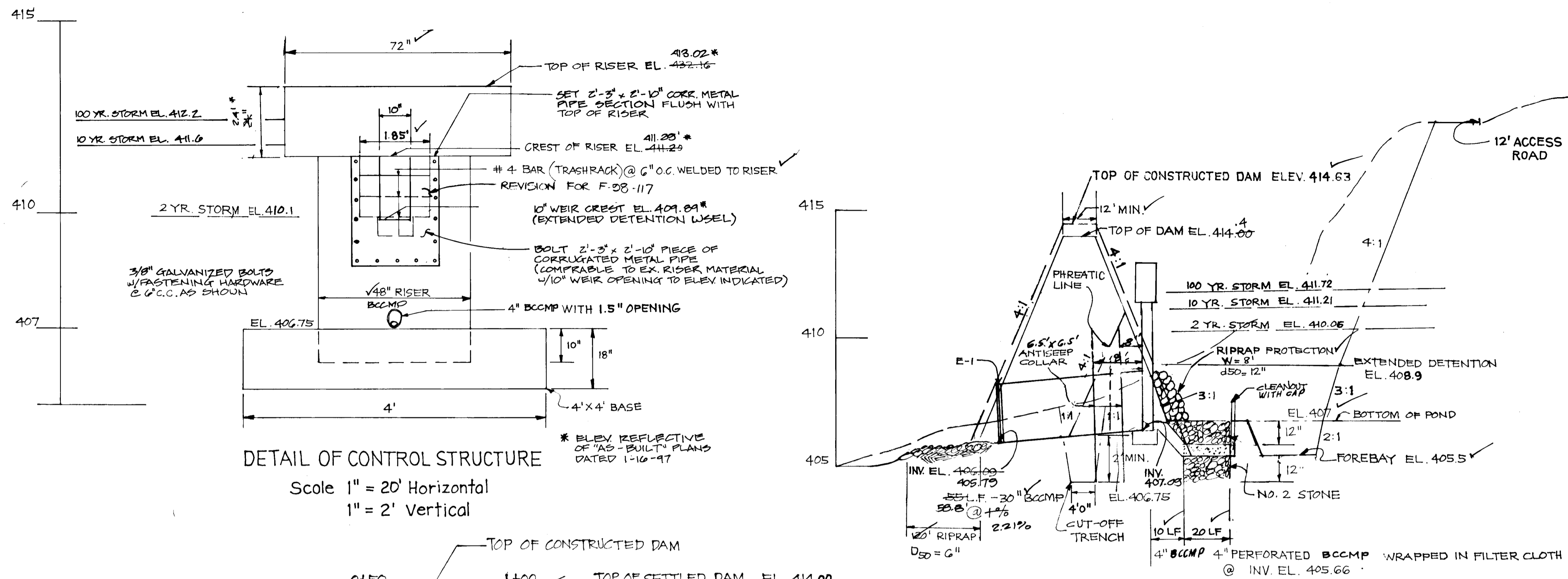
PLAN  
 SCALE: 1" = 50'





**STORM WATER MANAGEMENT PLAN**

SCALE 1" = 20'



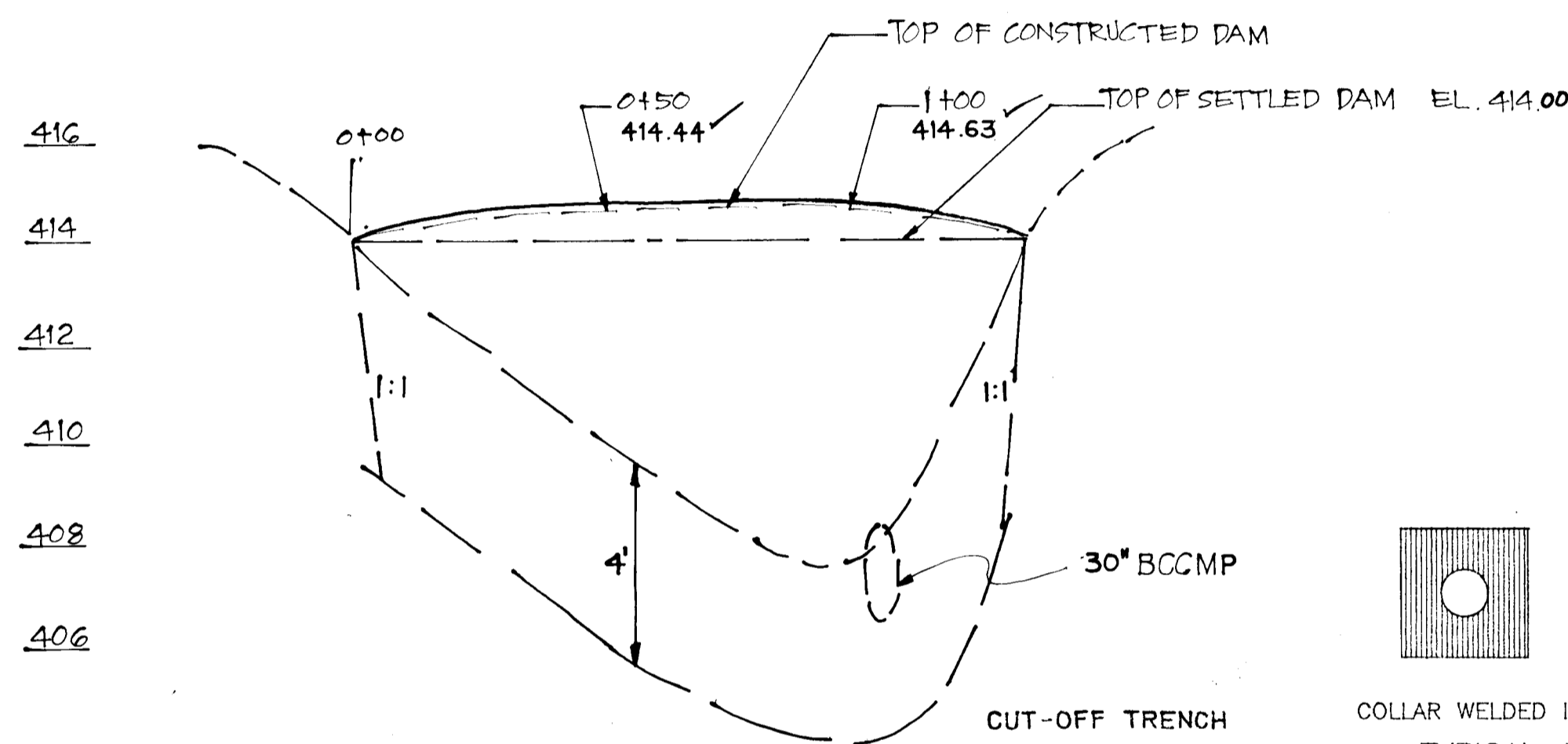
**DETAIL OF CONTROL STRUCTURE**

Scale 1" = 20' Horizontal  
1" = 2' Vertical

**PROFILE THRU PRINCIPAL SPILLWAY**

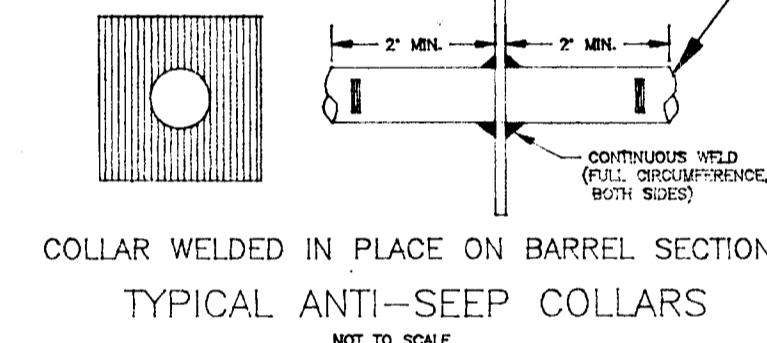
SCALE: 1" = 30' HOR.  
1" = 3' VER.

NOTE: POND IS HAZARD CLASS "A"



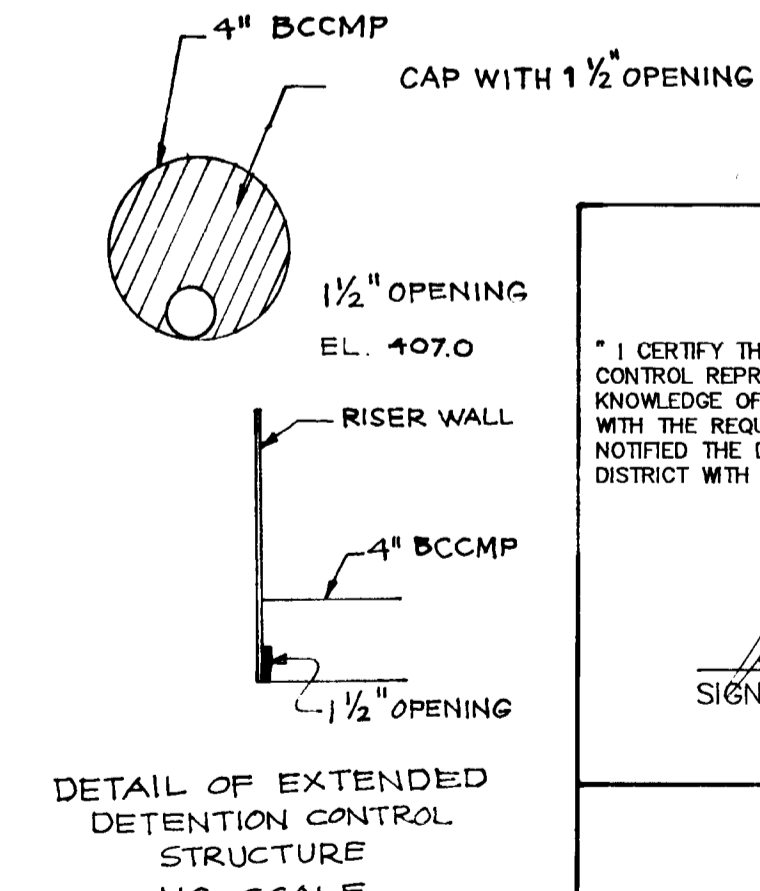
**PROFILE THRU CENTERLINE OF DAM**

Scale: 1" = 30' Hor.  
1" = 3' Ver.



TYPICAL ANTI-SEEP COLLARS  
NOT TO SCALE

Boring # B-1 Job # 92007										Boring # B-2 Job # 92007										Boring # B-3 Job # 92007															
SAMPLER		Datum		Hammer Wt.		Hole Diameter		Foreman		Inspector		SAMPLER		Datum		Hammer Wt.		Hole Diameter		Foreman		Inspector		SAMPLER		Datum		Hammer Wt.		Hole Diameter		Foreman		Inspector	
NO.	DEPTH	DATE	TIME	IN.	LB.	IN.	IN.	W.	W.	W.	W.	NO.	DEPTH	DATE	TIME	IN.	LB.	IN.	IN.	W.	W.	W.	W.	NO.	DEPTH	DATE	TIME	IN.	LB.	IN.	IN.	W.	W.	W.	W.
<p>Soil description: SURFACE: Brown moist stiff to very soft fine to medium sandy silt with some mica, trace rock fragments (ML)</p> <p>Soil description: 4-8: Brown, white moist medium dense fine to medium sand with some silt and mica, trace rock fragments (SM)</p> <p>Soil description: 8.0: Brown, yellowish brown green moist dense to very dense, fine to coarse sand with some silt and mica trace of rock fragments (SM)</p> <p>Soil description: 10.0: White, brown moist dense silty fine to medium sand with trace rock fragments (SM)</p> <p>Bottom of Boring at 21.5'</p>																																			



DETAIL OF EXTENDED DETENTION CONTROL STRUCTURE  
NO SCALE

**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Signature: [Signature]  
Date: 5/12/93

**DEVELOPER'S CERTIFICATE**

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: [Signature]  
Date: 5-12-93

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for the small pond construction, soil and sediment control.

Signature: [Signature] 5/7/93  
U.S. Soil Conservation Service Date

These plans for Soil and Sediment Control meet the requirements of the Howard County Soil Conservation District.

Signature: [Signature] 5/7/93  
Howard Soil Conservation District Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
Signature: [Signature] 5/12/93  
CHIEF, LAND DEVELOPMENT DIVISION DATE

Signature: [Signature] 5/12/93  
CHIEF, BUREAU OF HIGHWAYS DATE

Signature: [Signature] 5-12-93  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
Signature: [Signature] 5/24/93  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

PROJECT: FONT HILL MANOR FARM ESTATES SECTION ONE, LOTS 1-12

LOCATION: TAX MAP 24, PARCEL 725 ELECTION DISTRICT HOWARD COUNTY, MARYLAND

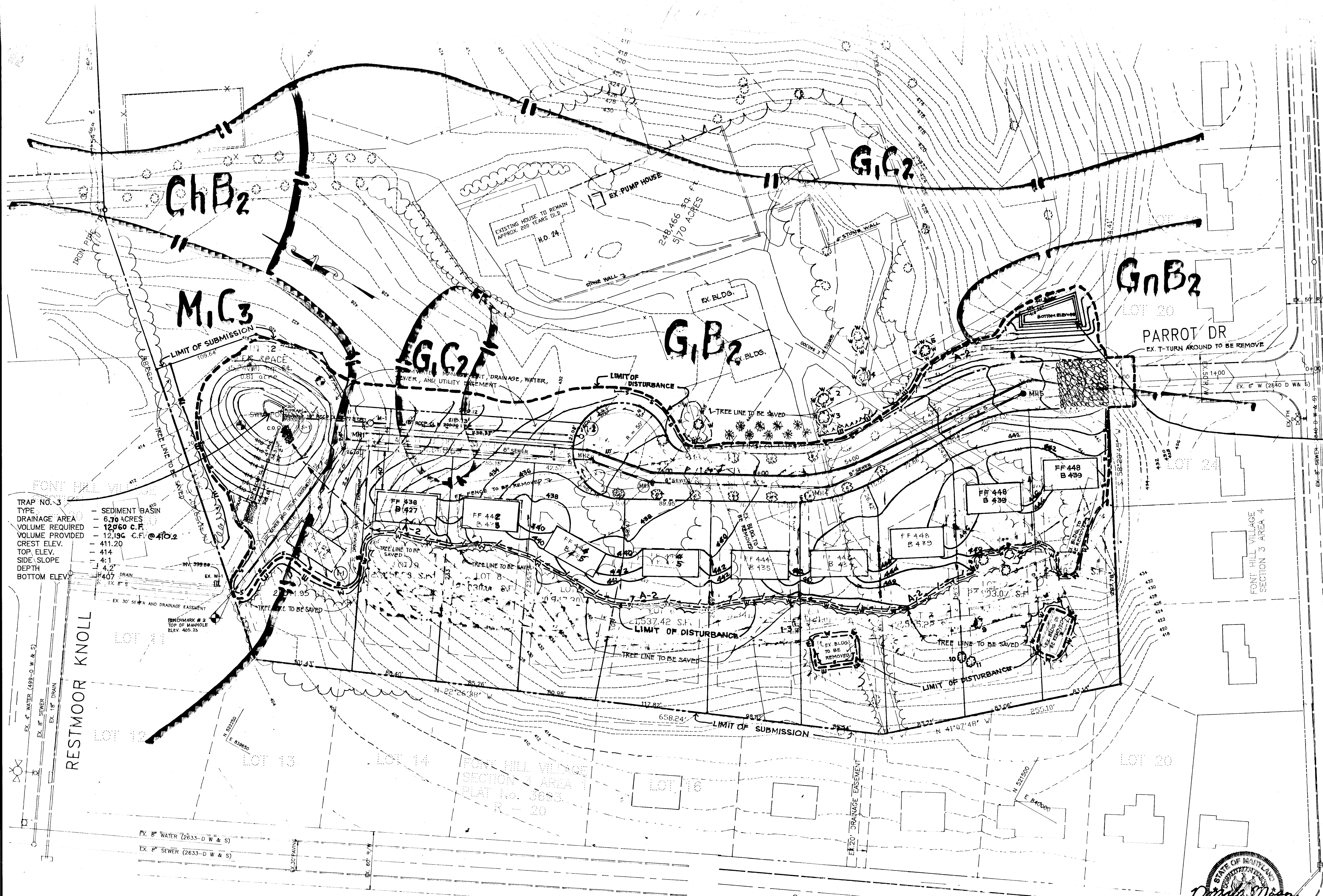
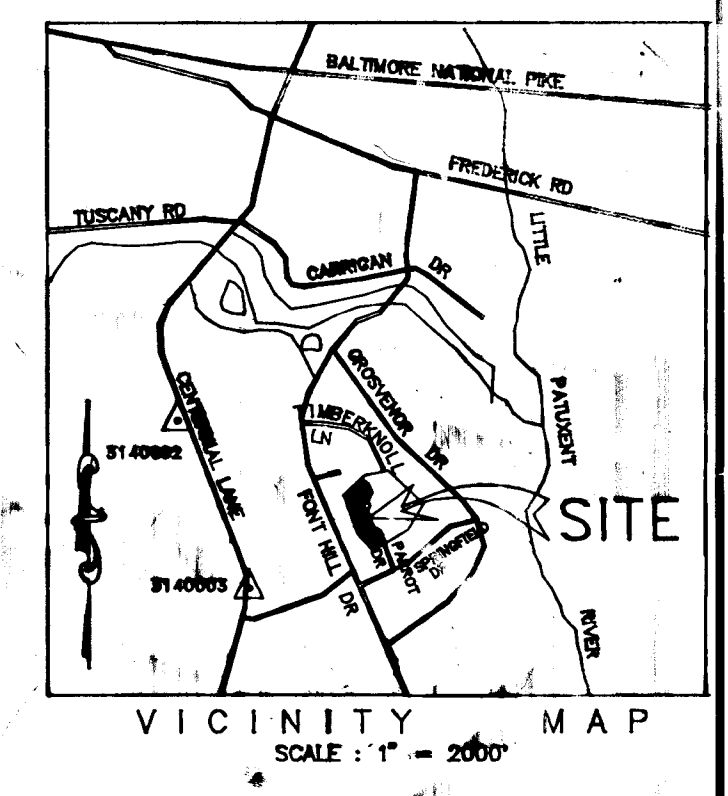
TITLE: STORMWATER MANAGEMENT POND PLAN AND DETAILS

OWNER: TIMOTHY E. WELSH P.O. BOX 1447 ELLICOTT CITY, MD. 21041-1447

DEVELOPER: TIMOTHY E. WELSH P.O. BOX 1447 ELLICOTT CITY, MD. 21041-1447

DESIGN: MLL CHECKED: MLL DATE: 10-22-92 PROJ. NO.  
DRAWN: JC APPROVED: MLL SCALE: AS SHOWN SHEET: 6 OF 8

1591



- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT
  - INSTALL BLAZE ORANGE PLASTIC WIRE MESH TREE PROTECTION
  - INSTALL ALL SEDIMENT CONTROL MEASURES SHOWN ON THIS PLAN SUCH AS STONE CONSTRUCTION ENTRANCE AND SILT FENCE.
  - CONSTRUCT STORMWATER MANAGEMENT POND. DO NOT CONSTRUCT OPENING FOR 2 YRS. AND 10 YRS. STORM, BLOCK 2" BOCMP.
  - GRADE THE AREA AS SHOWN AND CONSTRUCT UTILITIES AND ROADS.
  - STABILIZE ALL DISTURBED AREAS FOR ROAD & UTILITY CONSTRUCTION
  - HOME CONSTRUCTION FOR LOTS 1 THRU 9
  - NOTE THE EARTH DIKE SHOWN ON LOT 10 MAY NOT BE REMOVED UNTIL ALL LOTS UPGRADE OF LOT 10 HAVE BEEN BUILT UPON & PERMANENTLY STABILIZED
  - UPON COMPLETION OF HOME CONSTRUCTION REMOVE SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH HOWARD COUNTY SOIL CONSERVATION DISTRICT REQUIREMENTS EXCEPT FOR THOSE MEASURES ON LOT 10.
  - DISTRICT REQUIREMENTS EXCEPT FOR THOSE MEASURES ON LOT 10. DISTURBED AREAS STABILIZED.
  - REMOVED SILT FENCE FROM STORMWATER MANAGEMENT POND & CONSTRUCT 2 YRS. & 10 YRS. WEIRS UNBLOCK 2" BOCMP.

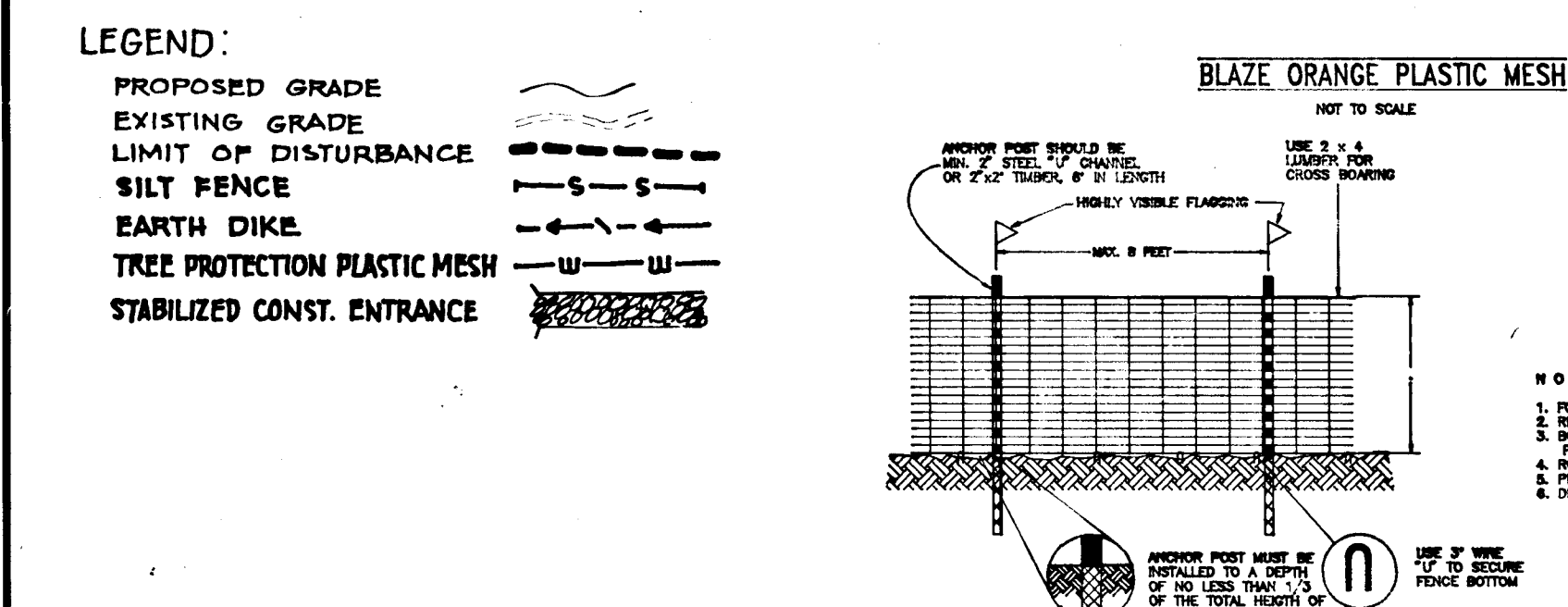
**TRAP NO. 1**

TYPE	STONE OUTLET
DRAINAGE AREA	0.90 ACRE
VOLUME REQUIRED	1,620 C.F.
VOLUME PROVIDED	1,772 C.F.
BOTTOM DIMENSION	55' x 7' x 22'
CREST ELEV.	421'
TOP ELEV.	422'
SIDE SLOPE	1:1
DEPTH	3'
CLEAN OUT ELEV.	420'
BOTTOM ELEV.	418'

**TRAP NO. 3**

TYPE	SEDIMENT BASIN
DRAINAGE AREA	6.70 ACRES
VOLUME REQUIRED	12,960 C.F.
VOLUME PROVIDED	12,936 C.F. @ 410.2
CREST ELEV.	411.20
TOP ELEV.	414
SIDE SLOPE	4:1
DEPTH	4.2
BOTTOM ELEV.	407

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Chad Dammann* 5/16/92  
 CHIEF, DIVISION OF MAIN DIVISION  
*Chad M. Dammann* 5/16/92  
 CHIEF, BUREAU OF HIGHWAYS  
*James R. Dammann* 5-12-92  
 CHIEF, BUREAU OF ENGINEERING  
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Elmira Halonast* 5/24/92  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



**PLAN**  
**FONT HILL DRIVE**

SCALE: 1" = 50'

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for the small pond construction, Soil and Sediment Control.

*John W. Ziehm* 5/19/92  
 U.S. Soil Conservation Service

These plans for Soil and Sediment Control meet the requirements of the Howard County Soil Conservation District.

*Robert Ziehm* 5/19/92  
 Howard Soil Conservation District

**DEVELOPER'S CERTIFICATE**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND /OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

*Paul H. [Signature]*  
 Signature of Engineer

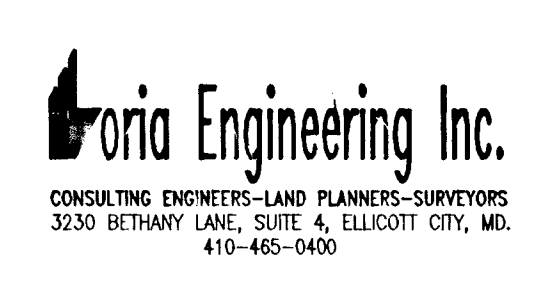
**ENGINEER'S CERTIFICATE**

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED BY ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

*Frederick [Signature]*  
 Builder/Developer

DATE: 5/23, 1992

NO.	DATE	REVISION
1		
PROJECT: FONT HILL MANOR FARM ESTATES SECTION ONE, LOTS 1-12		
LOCATION: TAX MAP 24, PARCEL 725 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: SEDIMENT CONTROL PLAN		
OWNER: TIMOTHY E. WELSH P.O. BOX 1447 ELLICOTT CITY, MD. 21041-1447		
DEVELOPER: TIMOTHY E. WELSH P.O. BOX 1447 ELLICOTT CITY, MD. 21041-1447		
DESIGN	M.L.L.	CHECKED M.L.L.
DRAWN	AVG	APPROVED M.L.L.
DATE: 10-21-92		PROJ. NO.
SCALE: 1" = 50'		SHEET 7 OF 9



**SPECIFICATIONS**

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

**SITE PREPARATION :**

Area under the borrow areas, embankment, and structural works shall be cleared, grubbed and the top soil stripped to remove all trees, vegetation, roots or the other objectionable material. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable materials unless otherwise designated on the plans. Trees, brush, and stump shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside the limits of the dam and reservoir as directed by the owner or his authorized representative. When specified, a sufficient quantity of top soil will be stockpiled in a suitable location for use on the embankment and other designated areas.

**EARTH FILL**

**Material :**  
The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, over-size stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

**Placement :**  
Area on which fill is to be placed shall be sacrificed prior to placement of the fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous material shall be placed in the downstream portions of the embankment.

**Compaction :**  
The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by aluminum of four complete passes of a sheepfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

**Cut-off Trench**

Where specified, a cut-off trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation. With the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment rollers or hand tampers to assure maximum density and a minimum permeability.

**STRUCTURE BACKFILL**

Backfill adjacent to pipes or structures shall be of the type and quality conforming to the specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

**PIPE CONDUITS**

**Corrugated metal pipe**  
**Materials - (steel pipe) -** This pipe and its appurtenance shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 type A with water tight coupling bands. Any bituminous coating damaged or otherwise removed shall be placed with cold applied bituminous coating compound. Steel pipes with polymeric coatings shall have a minimum coating thickness of .01 inch (10 mil) on both sides of the pipe. The following coatings or an approved equal may be used: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

**Materials - (Aluminum Coated Steel Pipe) -** This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

**Materials - (Aluminum Pipe) -** This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

Coupling band, anti-seep collars, end sections etc., must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

**Connections -** All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connection shall used a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled on adequate number of corrugations to accommodate the band width. The following type connection are acceptable for pipe less than 48" inches diameter: flanges on both ends of the pipe, a 12" wide standard lap type band with 12" wide by 3/8" thick closed cell circular neoprene gasket; and a 12" wide hugger type band with o-ring gaskets having a minimum diameter of 1/2" greater than the corrugated depth. Pipes 48" in diameter and larger shall be connected by a 24" long annular corrugated bands using rods and lugs. A 12" wide by 3/8" thick closed cell circular neoprene gasket will be installed on the end of each pipe for a total of 24" helically corrugated pipe shall have either continuously welded seams or have lock seams.

**Bedding -** The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

Backfilling shall conform to "Structure Backfill".

Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

**REINFORCED CONCRETE PIPE:**

**Materials -** Reinforced concrete pipe shall have bell and spigot joints with rubber gasket and shall equal or exceed ASTM Designation C-361. An approved equivalent is AWWA specification C-302.

**Bedding -** All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the drawings.

**Laying pipe -** Bell and spigot pipe shall be placed with the bell end upstream, joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.

Backfilling shall conform to "Structure Backfill".

Other details (anti-seep collar, valves, etc.) shall be as shown on the drawings.

**POLYVINYL CHLORIDE (PVC) PIPE**

**Materials -** PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241.

Joints and connections to anti-seep collars shall be completely watertight.

**Bedding -** The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

**CONCRETE :**

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specification for Construction and Materials, Section 608, Mix No. 3.

**ROCK RIPRAP :**

All rock shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. The rock fragments shall be angular to subrounded in shape. The least dimension of an individual rock fragment shall be not less than one third the greatest dimension of the fragments.

The rock shall have the following properties :

1. Bulk specific gravity (saturated surface-dry basis) not less than 2.5.
2. Absorption not more than three percent.
3. Soundness : Weight loss in five cycles not more than 20 percent when sodium sulfate is used.

Bulk specific gravity and absorption shall be determined according to ASTM C 127. The test for soundness shall be performed according to ASTM C 88.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger uniformly distributed and firmly in contact one to another with the smaller rock s filling the voids between the larger rocks. Filter cloth shall be under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration for Construction and materials, Section 919.12.

**CARE OF WATER DURING CONSTRUCTION:**

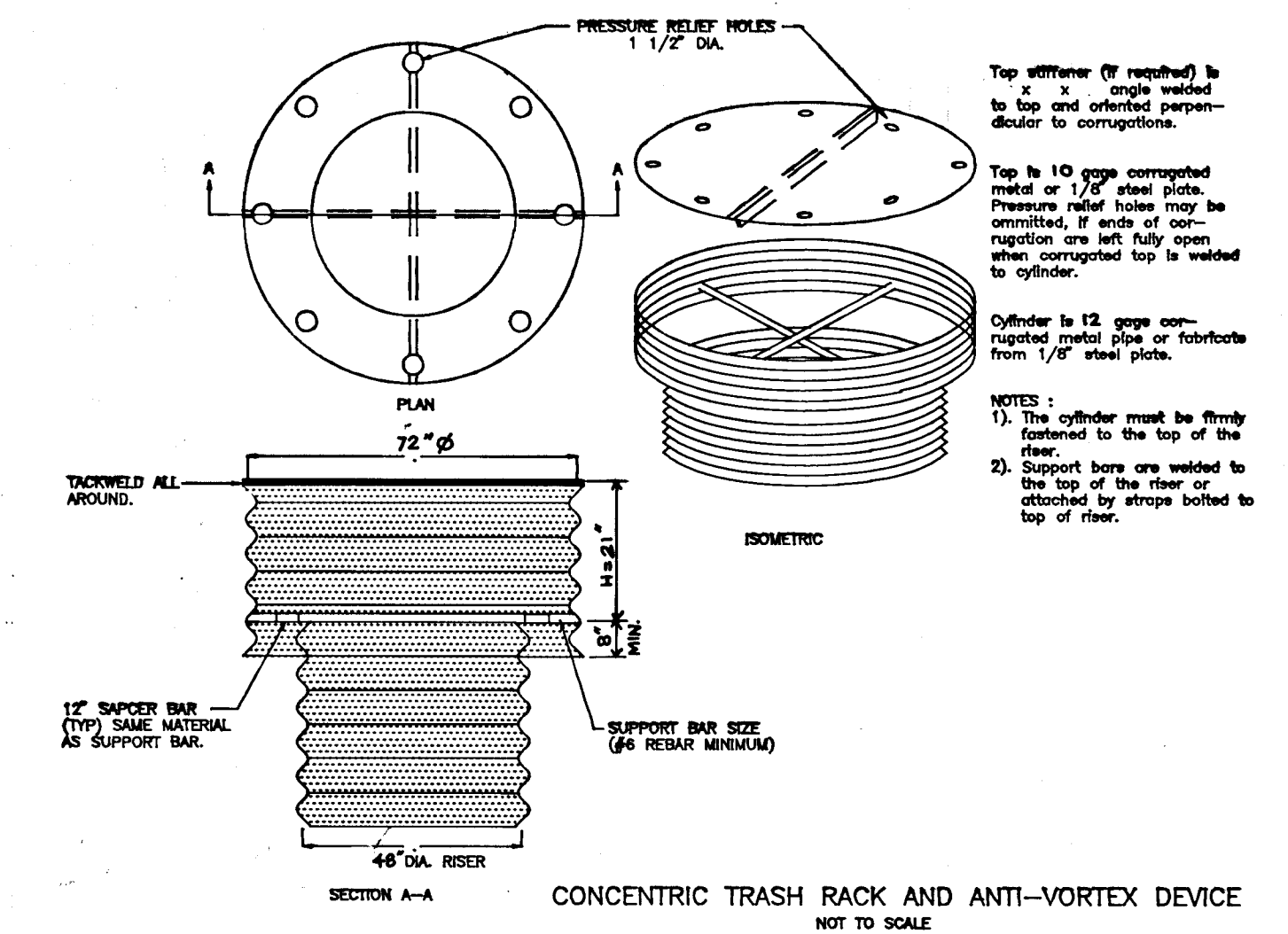
All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels and streams diversions necessary to protect the areas to be occupied by the permanent works the contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required by the Engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the location being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to sumps from which the water shall be pumped.

**STABILIZATION :**

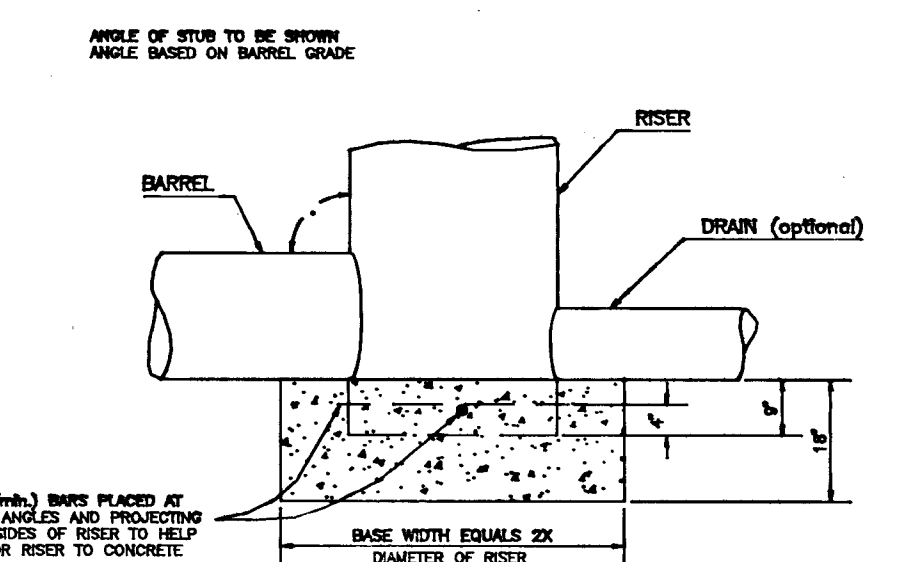
All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

**EROSION AND SEDIMENT CONTROL :**

Construction operation will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.



**CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE**  
NOT TO SCALE



**RISER BASE DETAIL**

- NOTES:**
1. THE CONCRETE BASE SHALL BE POURED IN SUCH A MANNER TO INSURE THAT THE CONCRETE FILLS THE BOTTOM OF THE RISER TO INVERT OF THE OUTLET PIPE TO PREVENT THE RISER FROM BREAKING AWAY FROM THE BASE.
  2. WITH ALUMINUM OR ALUMINIZED PIPE, THE EMBEDDED SECTION MUST BE PAINTED WITH ZINC CHROMATE OR EQUIVALENT.
  3. RISER BASE MAY BE SIZED AS COMPUTED USING FLOTTATION WITH A FACTOR OF SAFETY OF 1.2.



APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Howard County Department of Planning and Zoning*  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 DATE: 5/14/93

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Howard County Department of Public Works*  
 CHIEF, LAND DEVELOPMENT DIVISION  
 DATE: 5/14/93

APPROVED : HOWARD COUNTY DEPARTMENT OF HIGHWAYS  
*Howard County Department of Highways*  
 CHIEF, BUREAU OF ENGINEERING  
 DATE: 5-12-93

**Woria Engineering Inc.**  
 CONSULTING ENGINEERS-LAND PLANNERS-SURVEYORS  
 3230 BETHANY LANE, SUITE 4, ELLICOTT CITY, MD.  
 TEL 410-465-0400

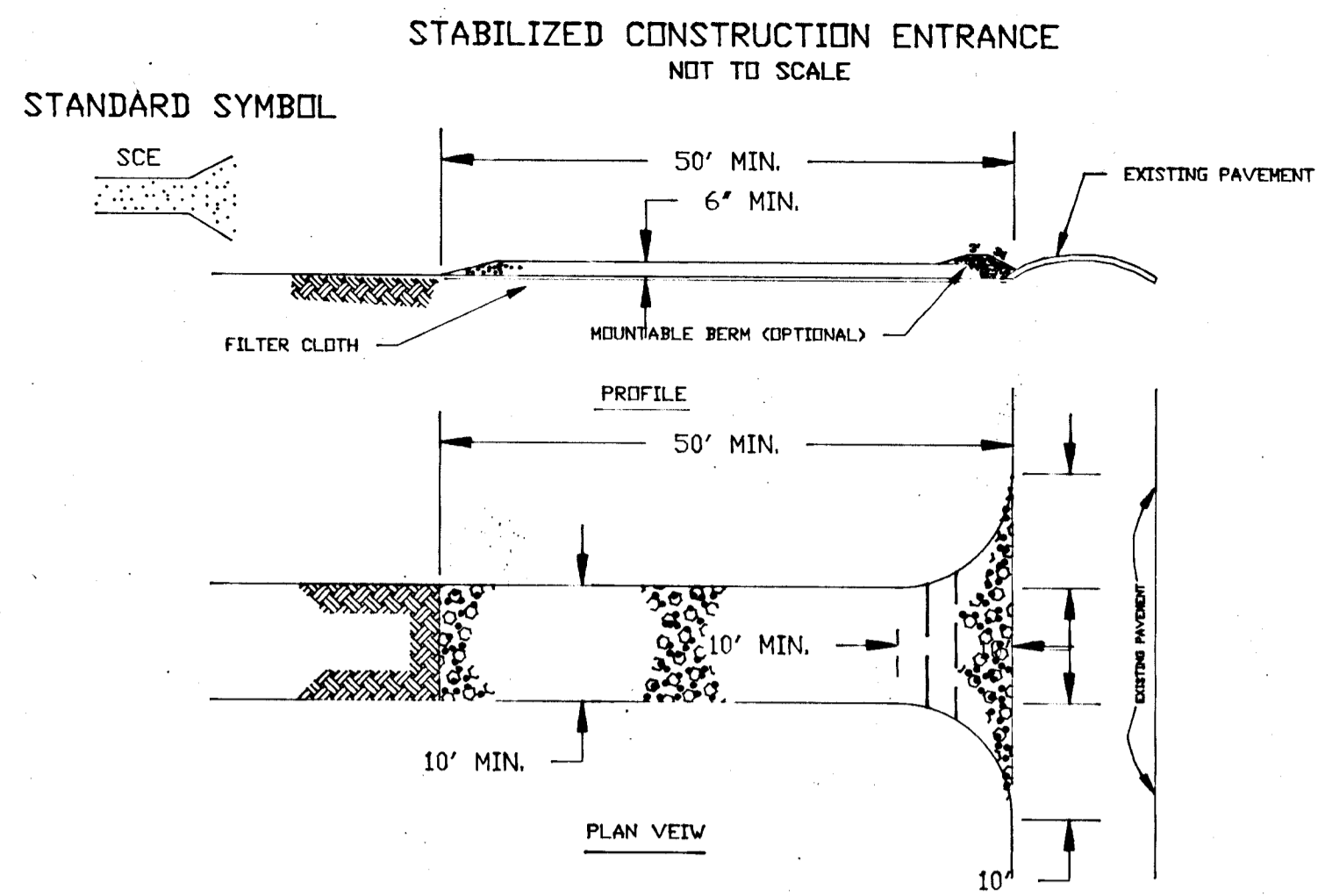
These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for the Smallpond construction, soil and sediment control.  
*Robert W. Zielinski* 5/14/93  
 CONSULTATION SERVICE  
 These plans for Soil and Sediment Control meet the requirements of the Howard County Soil Conservation District.  
 DATE: 5/14/93

**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.  
*Robert W. Zielinski*  
 SIGNATURE OF ENGINEER  
 DATE: 5/14/93

**DEVELOPER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND /OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Anthony J. West*  
 SIGNATURE OF DEVELOPER  
 DATE: 8-5-92

**GENERAL NOTES FOR PONDS**  
 FONT HILL MANOR FARM ESTATES  
 SECTION 1 LOTS 1-2  
 DATE: 8-7-92

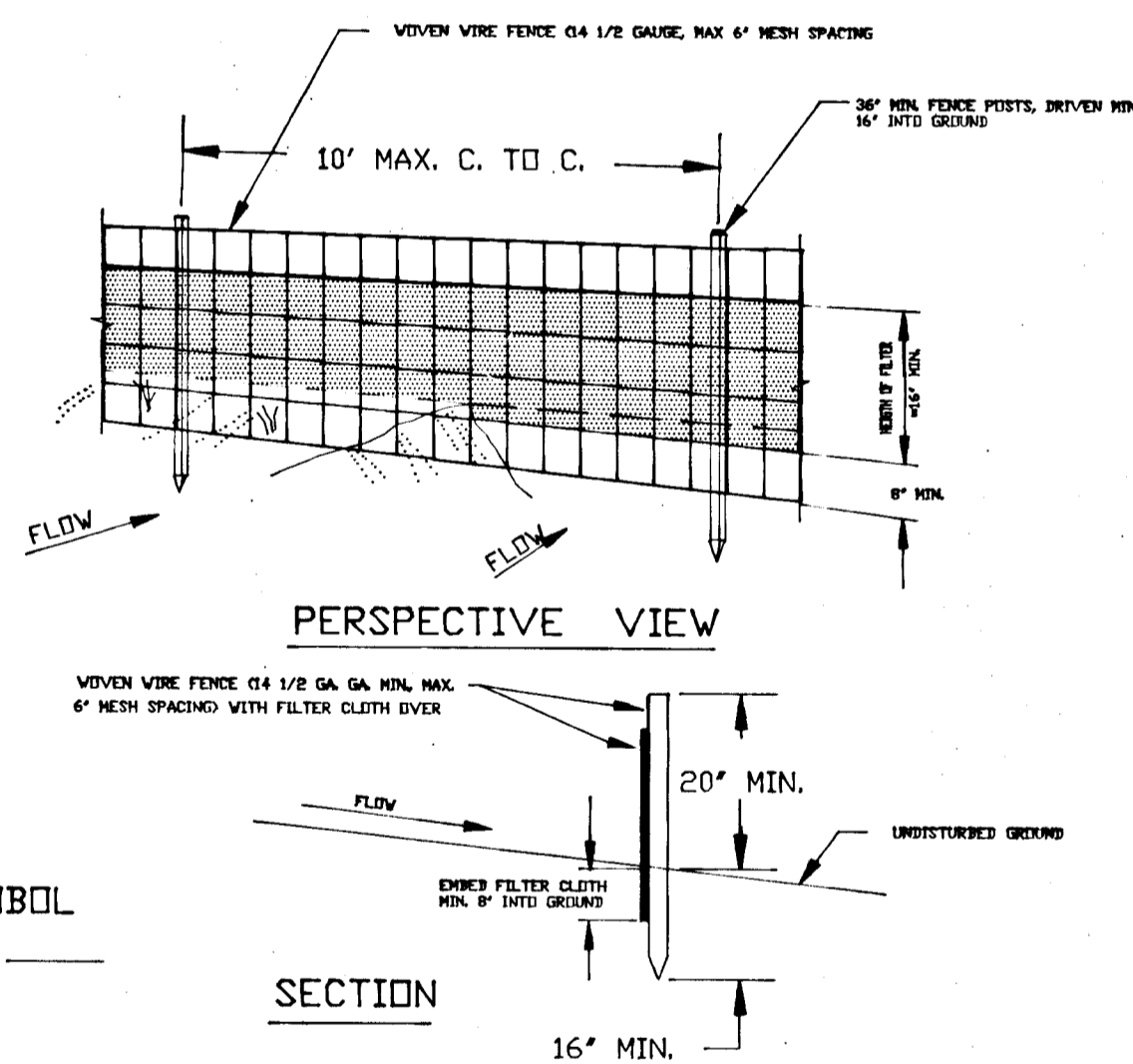




**CONSTRUCTION SPECIFICATION**

- STONE SIZE - USE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - MINIMUM 10' WIDTH, BUT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS - OF - WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS - OF - WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS - OF - WAY. WHEN IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**SILT FENCE**



**CONSTRUCTION NOTES FOR FABRICATION SILT FENCE**

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.

**PERMANENT SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, UNLESS PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FEET) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT).
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (14 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (05 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD, OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL-ANCHORED STRAW.

MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**TEMPORARY SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, UNLESS PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).

SEEDING - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (32 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**STANDARD AND SPECIFICATION FOR VEGETATIVE STABILIZATION WITH SOD**

- CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD.
- SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH.
- STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
- INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIER'S WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
- SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD SHALL BE INSPECTED AND APPROVED PRIOR TO ITS INSTALLATION.

**SITE PREPARATION**

FERTILIZER AND LIME APPLICATION RATES SHALL BE DETERMINED BY SOIL TESTS. UNDER UNUSUAL CIRCUMSTANCES WHEN THERE IS UNSUFFICIENT TIME FOR A COMPLETE SOIL TEST, FERTILIZER AND LIME MATERIALS MAY BE APPLIED IN AMOUNTS SHOWN UNDER B, BELOW.

- PRIOR TO SODDING, THE SURFACE SHALL BE CLEARED OF ALL TRASH, DEBRIS, AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES, AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
- WHERE THE SOIL IS ACID OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 2 TONS/ACRE OR 100 POUNDS PER 1,000 SQUARE FEET. IN ALL SOILS 1,000 POUNDS PER ACRE OR 25 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 FERTILIZER OR EQUIVALENT SHALL BE UNIFORMLY APPLIED AND MIXED INTO THE TOP 3 INCHES OF SOIL WITH THE REQUIRED LIME.
- ALL AREAS RECEIVING SOD SHALL BE UNIFORMLY FINE GRADED. HARD-PACKED EARTH SHALL BE SCAREFIED PRIOR TO PLACEMENT OF SOD.

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (996-2437)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE	6.69 ACRES
AREA DISTURBED	3.0 ACRES
AREA TO BE RESTORED OR PAVED	1.70 ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.99 ACRES
TOTAL CUT	2200 CU. YDS
TOTAL FILL	2200 CU. YDS
OFF-SITE WASTE/BORROW AREA LOCATION	N/A
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS. MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.



**ENGINEER'S CERTIFICATE**

I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site and conditions and it was prepared in accordance with the requirements of Howard Soil Conservation District.

Signature of Engineer: *Robert W. Zielhuis* DATE: 5/17/93

**DEVELOPER'S/BUILDER'S CERTIFICATE**

I/We certify that all development and construction will be done in accordance with this plan, and that any responsible personnel involved in the construction will have a Certificate of Attendance at the Department of the Environment, Approved Training Program for the Control of Sediment before beginning the project. I also authorize periodic inspection by the Howard Soil Conservation Service.

Signature of Developer: *Anthony J. Deane* DATE: 8-5-92

**FONT HILL MANOR FARM ESTATES SECTION-1 LOTS 1-12**

**SEDIMENT AND EROSION CONTROL NOTES**

owner: \_\_\_\_\_

SCALE: _____	DATE: 8-7-92	SHEET 9 of 9
DESIGNED BY: _____	DRAWN BY: _____	CHECKED BY: _____